

# **Audit**



# **Report**

**OFFICE OF THE INSPECTOR GENERAL**

**MANAGEMENT OF KITS**

Report No. 94-022

December 23, 1993

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**Department of Defense**

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### **Acronyms**

DCSC	Defense Construction Supply Center
DESC	Defense Electronics Supply Center
DLA	Defense Logistics Agency
DRMO	Defense Reutilization and Marketing Office
ICP	Inventory Control Point
NSN	National Stock Number
SAALC	San Antonio Air Logistics Center
SKO	Sets, Kits, and Outfits
SPCC	Ship Parts Control Center
TACOM	Tank-Automotive Command



**INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2884**

December 23, 1993

**MEMORANDUM FOR DEPUTY UNDER SECRETARY OF DEFENSE FOR  
LOGISTICS  
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL  
MANAGEMENT)  
ASSISTANT SECRETARY OF THE AIR FORCE  
(FINANCIAL MANAGEMENT AND COMPTROLLER)  
DIRECTOR, DEFENSE LOGISTICS AGENCY  
AUDITOR GENERAL, DEPARTMENT OF THE ARMY**

**SUBJECT: Audit Report on the Management of Kits (Report No. 94-022)**

We are providing this report for your review and comments. The report discusses the management of kits and whether guidance for disassembly and reutilization of unneeded kits was adequate and whether disassembly of unneeded kits could satisfy requirements for individual components of the kits. Comments on a draft of this report were considered in preparing the final report.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Therefore, we request that final comments on the unresolved recommendations and monetary benefits be provided by February 22, 1994. Recommendations and potential monetary benefits are subject to resolution in accordance with DoD Directive 7650.3 in the event of nonconcurrence. We also ask that your comments indicate concurrence or nonconcurrence with the internal control weakness highlighted in Part I.

The courtesies extended to the audit staff are appreciated. If you have any questions on this audit, please contact Mr. James Helfrich, Program Director, or Mr. Joel Chaney, Project Manager, in our Columbus Office at (614) 337-8009. The distribution of this report is in Appendix F.

*David K. Steensma*

**David K. Steensma  
Deputy Assistant Inspector General  
for Auditing**

## Office of the Inspector General, DoD

Report No. 94-022  
(Project No. 2LE-0041)

December 23, 1993

### MANAGEMENT OF KITS

#### EXECUTIVE SUMMARY

**Introduction.** A kit is a collection of related items issued as a single item of supply. Kits are established to support the maintenance of weapon systems and equipment, and are typically stocklisted during the initial provisioning of military equipment or a modification to military equipment. Kits are designed to support a specific maintenance function or task, such as the repair, overhaul, or modification of the equipment. Therefore, the kits may contain tools, test instruments, minor repair parts and supplies, equipment components, and instruction sheets needed to perform the maintenance task. Modification kits were excluded from our scope because of completed and ongoing audit coverage by the Service audit agencies.

**Objectives.** The objectives covered in this report included an evaluation of whether kit inventories, in excess of forecast requirements (economic retention, contingency retention, and potential excess stocks) were being disassembled to reclaim component parts with current or near term requirements or reutilized. Additional audit objectives were announced but not covered in this report for the reasons described in Part I.

**Audit Results.** The Military Departments' and Defense Logistics Agency's inventory control points did not disassemble long supply or excess inventories of kits to reclaim component parts or reutilize the kits. As a result, the inventory control points had not reclaimed components valued at \$1.62 million from excess kits or reutilized excess kits valued at \$440,000. In several cases, the inventory control points were purchasing components that were available from excess kits. The audit results relate to only the judgmental sample we reviewed and, accordingly, do not represent all the kits and components the inventory control points may have underutilized.

**Internal Controls.** Internal controls were not adequate to ensure that assets were effectively utilized. The Military Departments and Defense Logistics Agency had not issued guidance for evaluating the disassembly of kits to reclaim component parts to satisfy current requirements or the reutilization of kits, and did not provide oversight to ensure that such evaluations were performed. Details are provided in the finding and the controls assessed are described in Part I.

**Potential Benefits of Audit.** We identified potential monetary benefits of \$4.93 million which includes \$2.06 million related to the disassembly or reutilization of excess kits and \$2.87 million related to the cancellation of unnecessary purchases (see Appendix D).

**Summary of Recommendation.** We recommended that the Military Departments and Defense Logistics Agency jointly develop and implement guidance for evaluating the disassembly and reutilization of excess kits.

**Management Comments.** As of December 14, 1993, we had not received comments from the Army. The Navy and Air Force concurred with the finding and the intent of the recommendation. The Defense Logistics Agency partially concurred with the

finding and concurred with the recommendation. The Navy and Defense Logistics Agency suggested that the kit disassembly guidance be coordinated and implemented under the auspices of the Office of the Secretary of Defense. The Navy agreed with the monetary benefits cited in the report; however, the Air Force did not comment on the monetary benefits. The Defense Logistics Agency agreed that savings should accrue from a well installed disassembly program, but could not agree to a specific amount. Part II discusses managements' comments and audit responses to managements' comments. Part IV contains the complete text of managements' comments, including general comments on the draft report.

**Audit Response.** We request that the Army provide comments in accordance with DoD Directive 7650.3 in response to the final report. We request that the Navy and the Defense Logistics Agency provide additional comments on actions planned and completion dates for planned actions. Further, we request that the Air Force and Defense Logistics Agency provide comments on the potential monetary benefits. Comments to this final report are requested by February 22, 1994.

# Table of Contents

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Executive Summary	i
<b>Part I - Introduction</b>	1
Background	2
Objectives	2
Scope	2
Internal Controls	3
Prior Audit Coverage	4
Other Matters of Interest	4
<b>Part II - Finding and Recommendation</b>	5
Disassembly and Reutilization of Excess Kits	6
<b>Part III - Additional Information</b>	11
Appendix A. Sampling Plan	12
Appendix B. Prior Audit Coverage	14
Appendix C. Potential Benefit from Disassembly or Reutilization of Excess Kits	16
Appendix D. Summary of Potential Benefits Resulting from Audit	18
Appendix E. Organizations Visited or Contacted	19
Appendix F. Report Distribution	21
<b>Part IV - Management Comments</b>	23
Department of the Navy	24
Department of the Air Force	25
Defense Logistics Agency	26

This report was prepared by the Logistics Support Directorate, Office of the Assistant Inspector General for Auditing, Department of Defense. Copies of the report can be obtained from the Secondary Reports Distribution Unit, Audit Planning and Technical Support Directorate, (703) 614-6303 (DSN 224-6303).

## **Part I - Introduction**

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## **Background**

DoD Manual 4100.39-M, "Defense Logistics Information System Procedures Manual," April 1, 1992, defines a kit as a collection of related items issued as a single item of supply. Kits are designed to support a specific maintenance function or task, such as the repair, overhaul, or modification of weapon systems and equipment, and are typically stocklisted during the initial provisioning of military equipment or a modification to that equipment. However, a kit may also be established or modified after equipment has been fielded based on needs identified by maintenance personnel. Therefore, the kits may contain items such as tools, test instruments, minor repair parts and supplies, equipment components, and instruction sheets needed to perform the maintenance task.

## **Objectives**

The original objectives of the audit were to evaluate the effectiveness of the inventory management of kits and sets of spare and repair parts. Specifically, the audit objectives were to determine whether kits and sets were formed in the most economical manner, whether they provided the appropriate spare and repair parts and the minimum quantity of each, whether kits and sets and residual materiel were being adequately accounted for and used by the customers, and whether kit inventories, in excess of forecast requirements (economic retention, contingency retention, and potential excess stocks) were being disassembled to reclaim component parts with current or near term requirements or reutilized.

We did not evaluate the sets portion of our objective because, at the end of the audit survey, we determined that forecast requirements for sets of spare and repair parts were not material. Further, we did not evaluate whether kits were formed in the most economical manner, whether kits provided the minimum number of spare and repair parts, and whether kits and residual kit materiels were being adequately accounted for and used by the customers. We were not able to accomplish the above objectives because we could not identify a comprehensive, credible data base from which to sample kits. Appendix A provides additional detailed information.

## **Scope**

We limited the scope of our review to the management of kits that are stocklisted in the DoD Cataloging System and managed by the Military

Departments and DLA inventory control points (ICPs) in order to avoid overlap with recently completed Air Force Audit Agency and Naval Audit Service audits. The Air Force and Navy audits evaluated the management of modification kits, that is, kits established to support major weapons system modification programs. Specifically, the audits evaluated inventory requirements for modification kits, utilization of modification kits, and reclamation of modification kits that exceeded program requirements.

We evaluated the accuracy of the DoD Cataloging System regarding identification of kit nomenclature by selecting a sample of 128 kits for review. Generally the DoD Cataloging System was accurate in identifying kits.

To evaluate whether kit inventories in excess of current requirements were being effectively reutilized or disassembled to satisfy component part requirements, we judgmentally sampled kits that the Military Departments and DLA ICPs classified, in their requirements determination systems, as economic retention, contingency retention, or potentially excess inventory. We did not evaluate the accuracy of the requirements determination system. Within the requirements determination system, the central secondary item stratification identified the various classifications of the inventory. From a universe of 2,184 kits with inventory valued at \$103.2 million, we selected 79 kits with inventory valued at \$65.1 million for detailed review. Forecast requirements for 11 of the 79 kits were understated and inventory of \$31.6 million relating to the 11 kits was not actually above retention limits or potentially excess. Therefore, we deleted the 11 kits from our review. We limited our review to 68 kits with inventory valued at \$33.5 million. The audit sampling plan is discussed in Appendix A.

We examined requirements' documents for the kits and for major components of the kits (components having a unit price equal to or greater than 5 percent of the value of the kit), to determine whether disassembly of the kits could satisfy requirements for the component. We also queried the Defense Reutilization and Marketing Service's inventory system to determine whether kits that the ICPs had sent to disposal were still available for reclamation.

This economy and efficiency audit was made from May 1992 through March 1993 in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD, and accordingly, included such tests of internal controls as were considered necessary. Organizations visited or contacted during the audit are in Appendix E.

## Internal Controls

The audit identified material internal control weaknesses as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. Internal controls were not effective to ensure that assets were effectively utilized. The Military Departments and DLA had not issued

## **Introduction**

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guidance for inventory managers to evaluate the disassembly of kits to reclaim component parts to satisfy current requirements and the reutilization of kits, and did not provide oversight to ensure that such evaluations were performed. The audit recommendation, if implemented, will correct the weakness. Monetary benefits of approximately \$2.06 million, as discussed in Appendix D, could be realized by implementing the recommendation. The Defense Construction Supply Center (DCSC) did not consider the management controls over the reutilization or disassembly of excess kits to be a separate assessable unit under the Federal Manager's Financial Integrity Act. A copy of the final report will be provided to the senior official responsible for internal controls in each Military Department and in DLA.

## **Prior Audit Coverage**

During the last 5 years, the Air Force Audit Agency and the Naval Audit Service completed audits related to specific aspects of kit management. Appendix B summarizes the audits.

## **Other Matters of Interest**

During the audit, we evaluated requirements for some of the kits that were included in the review. We concluded that purchases of three kits (national stock numbers [NSNs] 2540-01-185-3216, 4310-01-170-2404, and 4910-01-165-0500) were excessive. We discussed our conclusions with item managers and officials at the ICPs, and the ICP managers and officials canceled or reduced purchases valued at \$460,000. The underlying causes of the excessive purchases (using nonrecurring demands and erroneous additive requirements to forecast requirements and not considering available assets in determining purchase quantities) were not unique to kits. Because these conditions have been reported in other audit reports, we are not making a separate recommendation in this report.

Additionally, the San Antonio Air Logistics Center (SAALC) was needlessly procuring 100 MJ1-B bombloders (NSN 1730-01-123-7269) valued at \$2.41 million. Our sample included a kit used to modify the bombloder from a gas to a diesel engine. While management of the kit was appropriate, the SAALC was erroneously computing requirements for the MJ1-B bombloder. Air Force bases had not updated requirements data (authorized and in use records) in the Support Equipment System (DO87N System). As a result, requirements were not adjusted for the phasedown of the A-7 aircraft and for planned base closures. After we brought the errors to the attention of the SAALC personnel, the purchase was canceled. In summary, purchases valued at \$2.87 million were reduced or canceled.

## **Part II - Finding and Recommendation**

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## **Disassembly and Reutilization of Excess Kits**

The Military Departments and Defense Logistics Agency inventory control points did not have effective programs for the disassembly of excess kits to reclaim component parts or the reutilization of kits. The inventory control points' programs were ineffective because the Military Departments and Defense Logistics Agency had not issued guidance for inventory managers to evaluate kit disposition, including guidance for coordinating the evaluation with other DoD inventory control points that have requirements for similar kits or kit components, and did not provide oversight to ensure that such evaluations were performed. As a result, the inventory control points had not reclaimed components valued at \$1.62 million from excess kits or reutilized excess kits valued at \$440,000. For 6 of the sampled kits that could have been disassembled to satisfy requirements for kit components, inventory managers were purchasing components valued at \$305,000 that were available from the excess kits.

### **Background**

The Army and Air Force issued guidance for the management of certain major tool kits and equipment modification kits. The guidance includes instructions for reporting kits as excess when the related maintenance program is completed or when the kit becomes obsolete; and it assigns the wholesale inventory manager the responsibility for disposition of the excess kits. The Navy and DLA had not issued similar guidance.

Army Circular 700-91-1, "Sets, Kits and Outfits (SKO) Management Procedure and Guidance," provides guidance on the management of SKO assemblies. SKOs are major items of supply, managed under the provisions of the Army Authorization Documents System. SKOs are designed to support or accomplish a specific mission or maintenance function. The U.S. Army Training and Doctrine Command designates SKO assemblages and components that are obsolete. U.S. Army Materiel Command item managers are required to provide instructions for the redistribution or disposal of obsolete assemblages or components.

The Army Deputy Assistant Secretary for Plans and Programs issued a policy memorandum, "Program/Project/Product Manager (PM) Owned Wholesale Stock," September 16, 1991, to establish procedures for monitoring and controlling PM owned stock. The policy requires that PMs validate the need for on-hand stock, annually; report excess or unneeded items to the respective

commodity manager for disposition; and ensure that arrangements are made for disposal or transfer of affected stock.

Air Force Manual 67-1, volume III, part 1, chapter 11, "Time Compliance Technical Order (TCTO) Supply Operating Procedures," requires air logistics center system program managers and item managers to screen and dispose of any unused materiel procured for a modification program when notified that a weapon system covered by a time compliance technical order will be deactivated or that the modification program has been completed.

Based on the results of our review, we concluded that more definitive guidance is needed, as described below.

## Evaluation of Kit Disassembly or Reutilization

Inventory managers did not effectively evaluate whether excess kits could be disassembled to satisfy requirements for the kit components or reutilized. Our review of 68 excess kits concluded that 19 of the 68 kits could have been either disassembled to satisfy requirements for kit components or reutilized. Disassembly or reutilization of these 19 kits would avoid current or forecast acquisition of inventory valued at \$2.06 million. Appendix C identifies the 19 kits and the benefit that could be realized if they were disassembled or reutilized. Inventory managers did not effectively evaluate kit disassembly or reutilization. The inventory manager evaluations were not performed or were incomplete because the Military Departments and DLA have not provided guidance for the managers to determine the potential for disassembly, reutilization, or disposal of kits that are excess to DoD requirements. Additionally, the Military Departments and DLA did not provide oversight to ensure that such evaluations were performed. Kit disassembly and reutilization are discussed below.

**Kit Disassembly.** Requirements for components of 18 of the 19 kits, valued at \$1.62 million, could have been satisfied through disassembly of the excess kits. Inventory managers, however, had not evaluated whether kit disassembly was justified. We attributed the inventory managers' lack of review to the absence of guidance and oversight from the Military Departments and DLA. For example, the U.S. Army Tank and Automotive Command (TACOM) managed a piston parts kit (NSN 2815-01-119-4183) and was retaining 137 piston kits, valued at \$210,980, as contingency retention stock. Although the piston kit was classified as obsolete, TACOM was retaining it for possible transfer to allied countries under the Conventional Forces Europe Treaty. At the same time that the piston kit was retained as contingency retention stock, TACOM was purchasing over 14,000 pistons (NSN 2815-00-427-0551), for use on other Army equipment. The piston was the principal component of the piston kit, with each piston kit containing 12 pistons. Requisitions for 4,630 pistons were back ordered because TACOM's stock of pistons was depleted. Although TACOM managed both the piston kit and the piston, each item was assigned to a different item manager. Item management

## Disassembly and Reutilization of Excess Kits

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records did not indicate that the piston was a component of the kit, or that the piston kit could be used to overhaul other Army equipment. We advised TACOM of the relationship between the piston kit and the piston, and recommended that 1,644 pistons, valued at \$205,500, be reclaimed from the 137 obsolete kits. TACOM consolidated the management of the piston kit and piston under one item manager and initiated action to disassemble the kits to satisfy existing requirements for the kit components.

Item managers stated that they reviewed component part requirements and directed the disassembly of 2 of the 19 kits. However the item managers' evaluations were not documented and did not consider other ICPs' requirements. For example, a TACOM item manager reviewed requirements for components of an excess winterization kit (NSN 2540-01-086-3115) and reclaimed two TACOM managed components, a heater (NSN 2540-01-169-5159) and a plenum assembly (NSN 2540-00-072-5627). After reclaiming the components, the item manager disposed of the remainder of the kit without inquiring whether components managed at other ICPs could be reclaimed. The DCSC had urgent requirements for another component of the kit, a duct assembly (NSN 2540-00-933-7181). We discussed the requirement with both commands and DCSC initiated action to reclaim 129 of the duct assemblies, valued at approximately \$11,522.

**Kit Reutilization.** Inventory for 2 of the 19 kits valued at \$440,000 could have been reutilized. However, inventory managers disposed of the kits without first evaluating alternative uses for them. For example, the Ships Parts Control Center (SPCC) disposed of a logic troubleshooting kit (NSN 6625-00-327-6512) that could have been upgraded to satisfy requirements for a newer version of the kit. The SAALC was the principal inventory manager of the troubleshooting kit. SPCC, the secondary inventory manager, managed and stocked the kit to support Navy customers. In August 1992, the SPCC item manager sent 116 troubleshooting kits to the Defense Reutilization and Marketing Office (DRMO) in Norfolk, Virginia, and 70 troubleshooting kits to other DRMOs. At the time of our audit, the DRMO in Norfolk, Virginia, still had 116 kits on hand; however, the other DRMOs had disposed of the 70 kits. Additionally, SPCC had on hand 139 troubleshooting kits in excess of its retention requirements. We concluded that the Defense Electronics Supply Center (DESC) had valid requirements for the 255 available kits (116 kits at the DRMO and 139 kits at SPCC).

Approximately 165 of the 255 troubleshooting kits could be reutilized by upgrading the kit to a newer version of the troubleshooting kit (NSN 6625-01-072-5804) that is managed by the DESC. The upgrade involved adding one component, a current tracer (NSN 6625-01-045-0376) that costs approximately \$744. Additionally, we concluded that requirements for three of the major kit components, also managed by DESC, justified disassembly of the remaining 90 troubleshooting kits. Based on the audit conclusions, the DESC item manager canceled an active purchase for 64 of the newer troubleshooting kits, valued at \$192,871, initiated action to recoup the 116 kits, valued at \$184,667, from DRMO Norfolk, Virginia, and started the process to transfer management of the 139 troubleshooting kits to DESC.

## **Recommendation, Management Comments, and Audit Response**

We recommend that the Commander, Army Materiel Command; the Commander, Naval Supply Systems Command; the Commander, Air Force Materiel Command; and the Director, Defense Logistics Agency jointly develop and implement guidance for evaluating kit disassembly or reutilization when inventories exceed forecast requirements levels. The guidance should include procedures for coordinating the evaluation with other Military Departments and Defense Logistics Agency inventory control points.

**Army Comments.** As of December 14, 1993, the Army had not provided comments on the draft report.

**Navy Comments.** The Assistant Secretary of the Navy (Research, Development and Acquisition) concurred with the recommendation. The Assistant Secretary suggested that the Deputy Under Secretary of Defense for Logistics coordinate the effort to develop guidance for kit disassembly.

**Air Force Comments.** The Office of the Deputy Chief of Staff (Logistics) concurred with the recommendation and identified corrective actions that will be taken and the planned dates for implementing those actions.

**DLA Comments.** The Office of the Comptroller, DLA, concurred with the recommendation and recommended that the Office of the Secretary of Defense chair the group to ensure uniform policy throughout the Services and Defense agencies.

The full texts of managements' comments are in Part IV of this report.

**Audit Response.** We request that the Army provide comments to the final report in accordance with DoD Directive 7650.3. The actions proposed by the Air Force satisfy the intent of the recommendation. Because the Navy and DLA suggested that the Office of the Secretary of Defense coordinate the development of guidance, we discussed the suggestion with representatives of the Office of the Deputy Under Secretary of Defense for Logistics. The Deputy Under Secretary representatives declined to chair the group; however, they indicated that, if needed, they would direct the components to establish a working group and would assign one component to chair the group. Accordingly, we request that the Navy and DLA reconsider their positions, coordinate with the Army and Air Force to establish a working group, and provide comments in response to the final report.

**Management Comments and Audit Response to Potential Monetary Benefits**

**Army Comments.** As of December 14, 1993, the Army had not provided comments to the draft report.

**Navy Comments.** The Assistant Secretary of the Navy (Research, Development and Acquisition) agreed with the monetary benefits cited in the report.

**Air Force Comments.** The Office of the Deputy Chief of Staff (Logistics) did not comment on the monetary benefits.

**DLA Comments.** The Office of the Comptroller, DLA, neither agreed nor disagreed with the monetary benefits. DLA agreed that savings should accrue from a well installed program but it could not agree to a specific amount.

The full texts of managements' comments are in Part IV of this report.

**Audit Response.** We request that the Army provide comments to the final report in accordance with DoD Directive 7650.3. We request that the Air Force either concur or nonconcur with the monetary benefits cited in the report (Appendix D) in its response to the final report. We also request that DLA reconsider its position because the estimated amount of benefits related to DLA, \$567,084, consisted primarily of actual benefits (\$386,421) that were realized while the audit was in progress.

## **Part III - Additional Information**

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## Appendix A. Sampling Plan

Kits that are stocklisted and managed by the Military Departments and DLA ICPs are identified in the DoD Cataloging System. We obtained cataloging data from the Defense Logistics Service Center, Battle Creek, Michigan. As of December 31, 1991, the DoD wholesale inventory management activities managed 62,086 items identified as kits by either the unit of issue for the item or the item name. Of the 62,086 kits, 12,660 had a standard unit price of \$500 or more. We limited our review to kits above the \$500 threshold in an attempt to ensure that the kits would include components of sufficient value to warrant more intensive management.

We judgmentally selected an audit sample of 49 kits based on forecast procurement requirements for the kits. The sample was to help us determine whether kits were formed in the most economical manner and provided the appropriate spare and repair parts and the minimum quantity of each. The sample was also used to determine whether kits and residual kit materiels were being accounted for and utilized by the DoD customers. The judgmental sample was selected from the DoD ICPs' central secondary item stratification at September 30 or December 31, 1991, depending upon the availability of data. We identified the kits with a forecast budget year deficit requiring purchase. At the time, the DoD ICPs forecast a budget year procurement requirement for 982 of the 12,660 kits. The forecast deficit for the 982 kits totaled \$67 million.

We judgmentally selected the 49 kits that had the most significant forecast budget year procurement requirement at nine of the ICPs. The procurement requirement for the 49 kits was \$32 million. We examined requirements documents for the 49 kits to confirm the reliability of the forecast budget year procurement requirement and to identify usage of the kits by DoD activities. However, the requirements forecasts for 29 of the 49 kits were inaccurate or had declined before the start of the audit. The remaining sample of 20 kits, which had forecast requirements of \$6.6 million, did not provide a comprehensive basis for evaluating the audit objectives. Accordingly, we discontinued audit effort related to those audit objectives.

To evaluate whether kit inventories in excess of current requirements were being effectively disassembled to satisfy component part requirements or reutilized, we judgmentally sampled kits that were classified as long supply or excess inventory. The audit sample was selected from the DoD ICPs' March 31 or June 30, 1992, central secondary item stratification, depending on the availability of data. We identified kits for which serviceable assets were stratified as long supply or excess inventory (economic retention, contingency retention, and potential DoD excess stock). At the time of the central secondary

## Appendix A. Sampling Plan

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item stratification, the ICPs reported that 2,184 of the 12,660 kits were in a long supply or excess inventory position. The long supply or excess inventory for the 2,184 kits was valued at about \$103.2 million.

We judgmentally selected 79 kits with long supply or excess inventory, valued at \$65.1 million, at nine of the ICPs. Our review of requirements data indicated that forecast requirements were inaccurate for 11 of the 79 kits. The 11 kits were not excess to DoD requirements. Accordingly, we limited our review to the remaining 68 kits with long supply or excess inventory valued at \$33.5 million.

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## Appendix B. Prior Audit Coverage

IG, DoD, Report No. 88-174, "Final Quick-Reaction Report on Screening of Excess Kits," June 28, 1988, stated that excess modification kits managed by the Program Executive Office, Close Combat Vehicles could be disassembled to satisfy requirements for kit components valued in excess of \$1.3 million. The report recommended that the Program Executive Office provide an inventory of all parts in the excess kits to the U.S. Army Armament, Munitions, and Chemical Command and that the Command use parts made available from the kit inventory to meet projected FYs 1988 and 1989 requirements. The Army concurred with the recommendations and initiated appropriate actions.

Naval Audit Service Report No. 044-W-93, "Management of Aeronautical Change Kits, June 15, 1993, reported that the Naval Air Systems Command and the Naval Aviation Maintenance Office did not adequately monitor inventory requirements for aeronautical change kits, and did not take timely, effective redistribution or reclamation action when the number of kits in inventory exceeded remaining modification requirements. The Naval Audit Service estimated that about \$5.5 million of excess kits could be turned in to the Navy supply system to satisfy other requirements. The report recommended that the Naval Air Systems Command turn in all excess modification kits to the Navy supply system; develop, issue, and implement procedures to define and identify excess kits and to redistribute or reclaim the excess kits; and strengthen management controls over aeronautical change kit inventories. The Navy concurred with the recommendations and initiated appropriate action.

The Air Force Audit Agency report (Project No. 91062042), "Effect of Force Structure Changes on Aircraft Modifications," November 26, 1991, concluded that the Air Force Logistics Command (currently the Air Force Materiel Command) had correctly stopped depot level modifications for aircraft being retired, however, procedures were not implemented to stop base-level modifications. Additionally, air logistics center personnel had not disposed of excess depot and base-level kits. The report concluded that the Air Force could save approximately \$20.4 million in labor and spare parts requirements by canceling the scheduled base-level modifications and recommended that the installation of modification kits be canceled for weapon systems with less than 5 years service life remaining, and that the Air Force amend regulations to clearly delineate responsibility for canceling depot and base level modification programs. The report also concluded that the Air Force could reclaim spare and repair parts from excess kits valued at \$42 million, and recommended that air logistics center personnel screen excess kits, use components to satisfy known requirements for spare or repair parts and dispose of unneeded components. The Air Force concurred with the recommendations and initiated action.

## Appendix B. Prior Audit Coverage

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The Air Force Audit Agency report (Project No. 0106215), "Management of the F100-PW-220E Engine Upgrade Program," August 29, 1991, reported that the 220E engine upgrade program was not effectively managed. Additionally, the Air Force Audit Agency reported the results of audits at the Ogden Air Logistics Center (Report No. 405-1-28), SAALC (Report Nos. 410-0-38 and 410-1-36), and Warner Robins Air Logistics Center (Report No. 425-1-40). The four reports concluded that purchases of installed and spare engine modification kits and 220E spare module kits were overstated, and that spare parts buys in support of the 220E upgrade kits duplicated buys in support of other engine upgrade programs. The Air Force concurred with the findings and recommendations and initiated appropriate actions.

The Air Force Audit Agency report (Project No. 0106210), "Management of Exchangeable Assets Removed During Modifications," April 3, 1991, concluded that the management of exchangeable assets removed during equipment modification was adequate. The audit showed that disposition instructions in time change technical orders were adequate, exchangeable assets were returned to the supply system, and materiel managers were notified of the pending modifications. The Air Force Audit Agency made no recommendations for corrective action.

The Air Force Audit Agency report (Project No. 0106217), "Management of Airframe Time Compliance Technical Orders Kits," January 16, 1991, stated that kit managers did not have adequate visibility and control of F-15 and F-16 aircraft kits. Specifically, kit managers were not advised of inventory adjustments affecting kit assets. Maintenance personnel removed over 2,100 kit parts without notifying kit managers. Kit managers were also not advised that base personnel retained 193 excess kits valued at \$254,000. The Air Force Audit Agency recommended that the Air Force revise policies for recording inventory adjustments and reporting parts removal, and that specific actions be taken to strengthen management controls at command and base level. The Air Force agreed with the findings and recommendations and initiated the appropriate actions.

## Appendix C. Potential Benefit from Disassembly or Reutilization of Excess Kits

Kit Information			Source of Supply	Component Information			Benefit Value
NSN	Quantity	Long Supply or Excess Value		NSN	Requirement		
<b><u>ATCOM</u></b> <sup>1</sup>							
1560-01-153-2312	108	\$ 307,044	ATCOM	1650-01-117-1222	108	\$ 223,560	
1615-01-115-7012	73	404,347	DGSC	1560-01-318-8603	6	8,295	
4920-00-422-1228	4	67,340	DGSC	6620-01-331-4001	1	20,287	
<b><u>TACOM</u></b>							
2540-01-152-4750	470	2,388,070	TACOM	2540-00-113-4180	<sup>3</sup>		
2590-01-119-5857	85	235,365	DGSC	6140-00-226-2092	33		21,171
2540-01-086-3115	129	166,926	TACOM	2540-00-072-5627	129	<sup>4</sup>	
			TACOM	2540-01-169-5159	129	<sup>4</sup>	
			DCSC	2540-00-933-7181	129		11,522
2815-01-119-4183	137	210,980	TACOM	2815-00-427-0551	1,644		205,500
<b><u>ASO</u></b> <sup>5</sup>							
1660-01-146-3393	35	549,150	ASO	1670-00-997-6662	70		36,680
2840-01-124-0909	110	177,100	ASO	1680-01-146-5162	35		33,180
		<sup>6</sup>		2840-01-124-0909	110		177,100
<b><u>SPCC</u></b>							
6625-00-327-6512	255	405,952	<sup>7</sup>	6625-00-327-6512	165		262,675
			DESC	6625-01-047-7309	90		31,112
			DESC	6625-01-072-5083	90		6,061
			DESC	6625-01-072-5085	90		29,362
3655-01-184-9191	211	297,510	SPCC	6685-01-111-8710	40	<sup>4</sup>	
<b><u>DCSC</u></b>							
2540-00-051-3839	1,201	3,047,441	DCSC	2510-01-275-0097	120		47,777
2590-00-121-8990	31	141,205	TACOM	2540-00-113-4180	1,201		637,731
4930-01-187-1592	437	613,985	DCSC	2510-00-412-1983	31		81,127
				4730-01-150-3108	135		12,276

See footnotes at end of chart.

## Appendix C. Potential Benefit from Disassembly or Reutilization of Excess Kits

Kit Information			Source of Supply	Component Information		
NSN	Long Supply or Excess Quantity	Value		NSN	Requirement	Benefit Value
<b>DCSC (cont'd)</b>						
4310-01-011-8494	100	\$185,153	DISC <sup>8</sup>	3110-00-068-2648	200	\$ 17,442
			ASO	3110-01-008-7937	200	32,400
6115-00-463-9085	425	374,425	DCSC	4820-00-136-1085	850	15,181
2540-00-903-0451	200	252,600	TACOM	2540-00-113-4180	200	106,200
2540-00-777-6758	66	140,646	DCSC	2540-00-020-8591	66	7,954
2540-00-960-3632	66	128,238	TACOM	2540-00-113-4180	66	<u>35,046</u>
Total disassembly or reutilization potential						<u>\$2,059,639</u>

<sup>1</sup> Aviation and Troop Command.

<sup>2</sup> Defense General Supply Center.

<sup>3</sup> The component, a vehicular heater, was in four of the sampled kits. The heater was interchangeable with another model of the heater that TACOM managed. Disassembly would satisfy known future requirements for the heater. At the end of audit fieldwork, only 1,467 of the 1,937 kits were available for disassembly. TACOM had disposed of 470 kits. Therefore, the opportunity for benefit was lost.

<sup>4</sup> The inventory manager directed kit disassembly.

<sup>5</sup> Aviation Supply Office.

<sup>6</sup> The ASO erroneously disposed of 59 of the 110 kits. When we advised the item manager that maintenance activities requisitioned the kit components, the item manager withdrew the kits from disposal and initiated action to reutilize the 110 kits.

<sup>7</sup> As discussed on page 10, we determined that the kit could be upgraded to a newer version of the kit managed by the DESC. When we advised DESC that the excess kits were available, the item manager withdrew the kits from disposal and canceled a purchase for the newer kit. The potential benefits from reutilization of the kit in this appendix is predicated on upgrading 165 of the excess kits, valued at \$262,675, to satisfy forecast peacetime requirements for the newer version of the kit.

<sup>8</sup> Defense Industrial Supply Center.

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## **Appendix D. Summary of Potential Benefits Resulting from Audit**

<b>Recommendation Reference</b>	<b>Description of Benefit</b>	<b>Amount and/or Type of Benefit</b>
Recommendation	<p>Internal Controls. Provide guidance for evaluating the disassembly of kits to reclaim needed component parts.</p> <p>Reutilization of kits and components of kits that are excess to operating requirements.</p>	<p>Funds put to better use of \$4.93 million of DoD Stock Funds. The \$4.93 million consists of \$2.06 million from disassembly or reutilization of excess kits (see Appendix C), and \$2.87 million related to the cancellation of purchases that were not a part of the audit samples (see Other Matters of Interest).</p>

## **Appendix E. Organizations Visited or Contacted**

### **Office of the Secretary of Defense**

Assistant Secretary of Defense (Production and Logistics), Supply Management Policy,  
Washington, DC

### **Department of the Army**

Headquarters, Deputy Chief of Staff (Logistics), Supply Policy, Washington, DC  
Headquarters, Army Materiel Command, Washington, DC  
U.S. Army Aviation Systems Command, St. Louis, MO  
U.S. Army Tank-Automotive Command, Warren, MI  
U.S. Army Force Integration Support Agency, Fort Belvoir, VA  
Red River Army Depot, Texarkana, TX  
Tobohanna Army Depot, Tobohanna, PA

### **Department of the Navy**

Headquarters, Naval Air System Command, Washington, DC  
Headquarters, Naval Sea Systems Command, Arlington, VA  
Headquarters, Naval Supply Systems Command, Washington, DC  
Headquarters, Space and Naval Warfare Systems Command, Washington, DC  
Aviation Supply Office, Philadelphia, PA  
Ships Parts Control Center, Mechanicsburg, PA  
Naval Audit Service, Arlington, VA

### **Department of the Air Force**

Headquarters, Deputy Chief of Staff (Logistics and Engineering), Supply Policy,  
Washington, DC  
Headquarters, Air Force Materiel Command, Dayton, OH  
Ogden Air Logistics Center, Hill Air Force Base, UT  
Oklahoma City Air Logistics Center, Tinker Air Force Base, OK

## **Appendix E. Organizations Visited or Contacted**

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### **Department of the Air Force (cont'd)**

Sacramento Air Logistics Center, McClellan Air Force Base, CA  
San Antonio Air Logistics Center, Kelly Air Force Base, San Antonio, TX  
Warner Robins Air Logistics Center, Robins Air Force Base, GA  
Air Force Audit Agency, Dayton, OH

### **Defense Agencies**

Headquarters, Defense Logistics Agency, Arlington, VA  
Defense Construction Supply Center, Columbus, OH  
Defense Electronics Supply Center, Dayton, OH  
Defense General Supply Center, Richmond, VA  
Defense Industrial Supply Center, Philadelphia, PA  
Defense Logistics Service Center, Battle Creek, MI  
Defense Personnel Support Center, Philadelphia, PA  
Defense Reutilization and Marketing Service, Battle Creek, MI

### **Contractor**

Hewlett-Packard Company, Santa Clara, CA

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## **Appendix F. Report Distribution**

### **Office of the Secretary of Defense**

Deputy Under Secretary of Defense for Logistics  
Assistant to the Secretary of Defense for Public Affairs  
Comptroller of the Department of Defense

### **Department of the Army**

Secretary of the Army  
Auditor General

### **Department of the Navy**

Secretary of the Navy  
Assistant Secretary of the Navy (Financial Management)  
Naval Audit Service

### **Department of the Air Force**

Secretary of the Air Force  
Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Air Force Audit Agency

### **Defense Agencies**

Director, Defense Contract Audit Agency  
Director, Defense Logistics Agency  
Director, Defense Logistics Studies Information Exchange  
Inspector General, Defense Intelligence Agency  
Inspector General, National Security Agency

## **Appendix F. Report Distribution**

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### **Non-Defense Federal Organizations**

**Office of Management and Budget**  
**U.S. General Accounting Office**

National Security and International Affairs Division, Technical Information Center  
National Security and International Affairs Division, Defense and  
    National Aeronautics and Space Administration Management Issues  
National Security and International Affairs Division, Military Operations and  
    Capabilities Issues

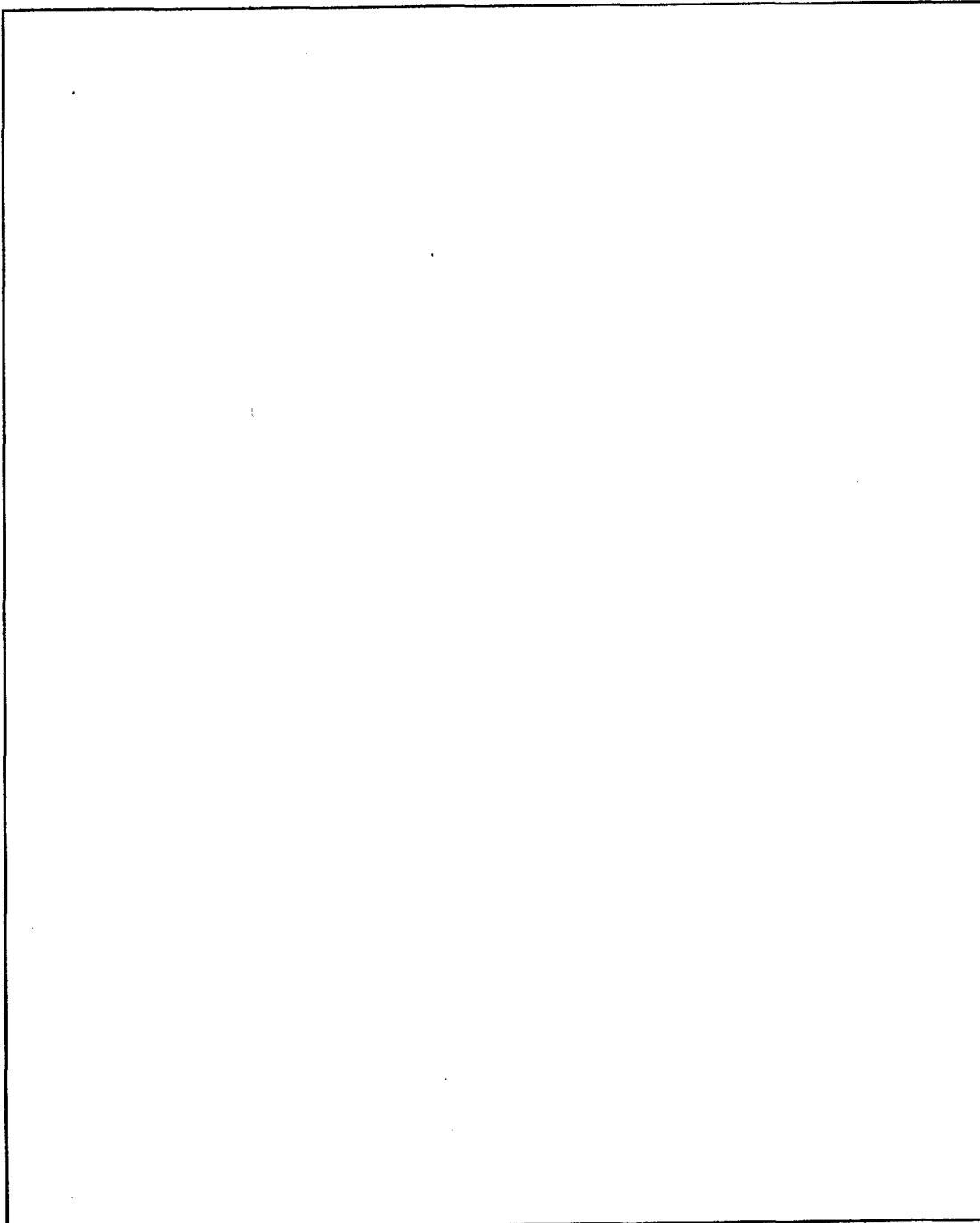
**Chairman and Ranking Minority Member of each of the following Congressional Committees and Subcommittees:**

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Operations  
House Subcommittee on Legislation and National Security, Committee on  
    Government Operations

## **Part IV - Management Comments**

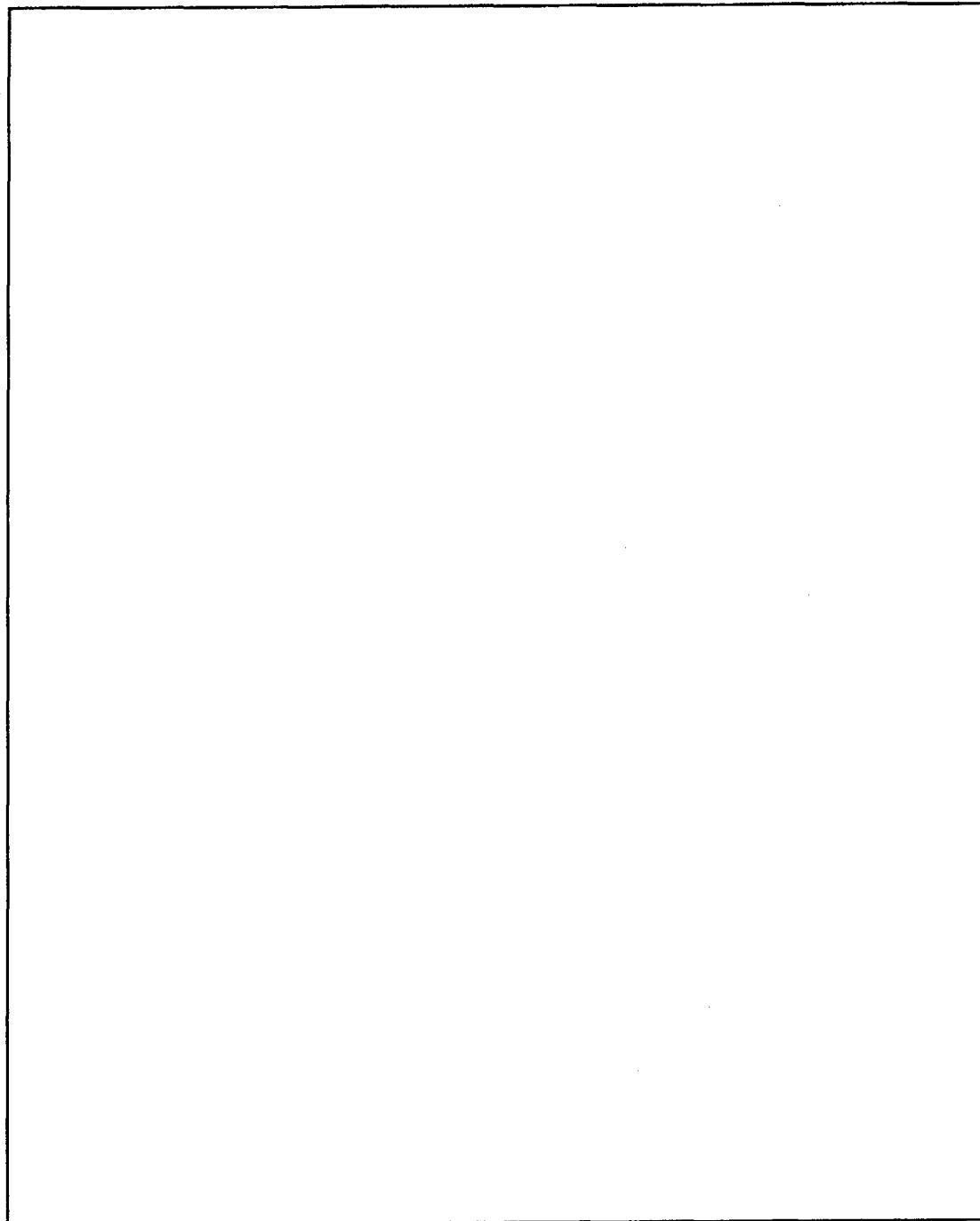
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## **Department of the Navy Comments**



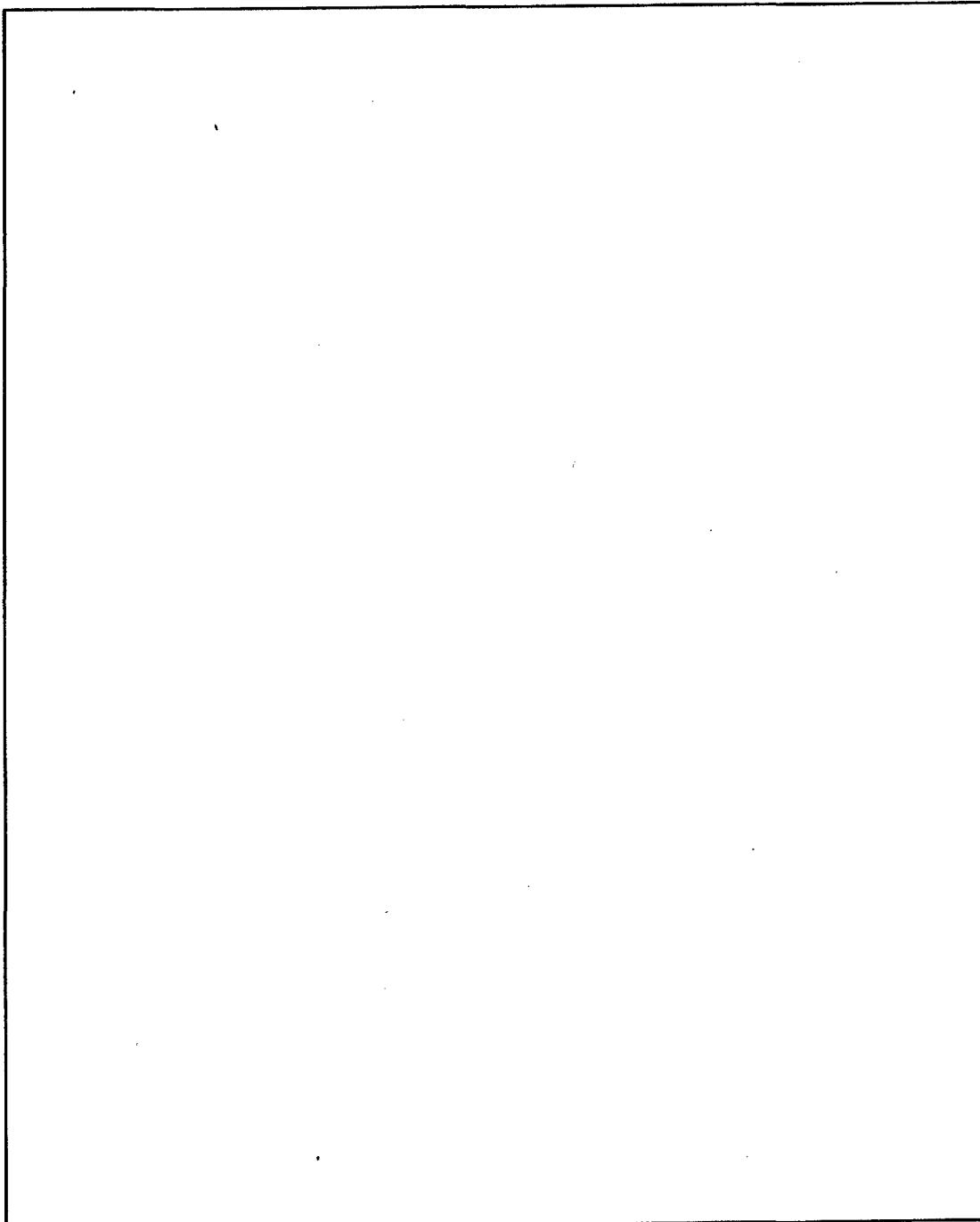
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## **Department of the Air Force Comments**



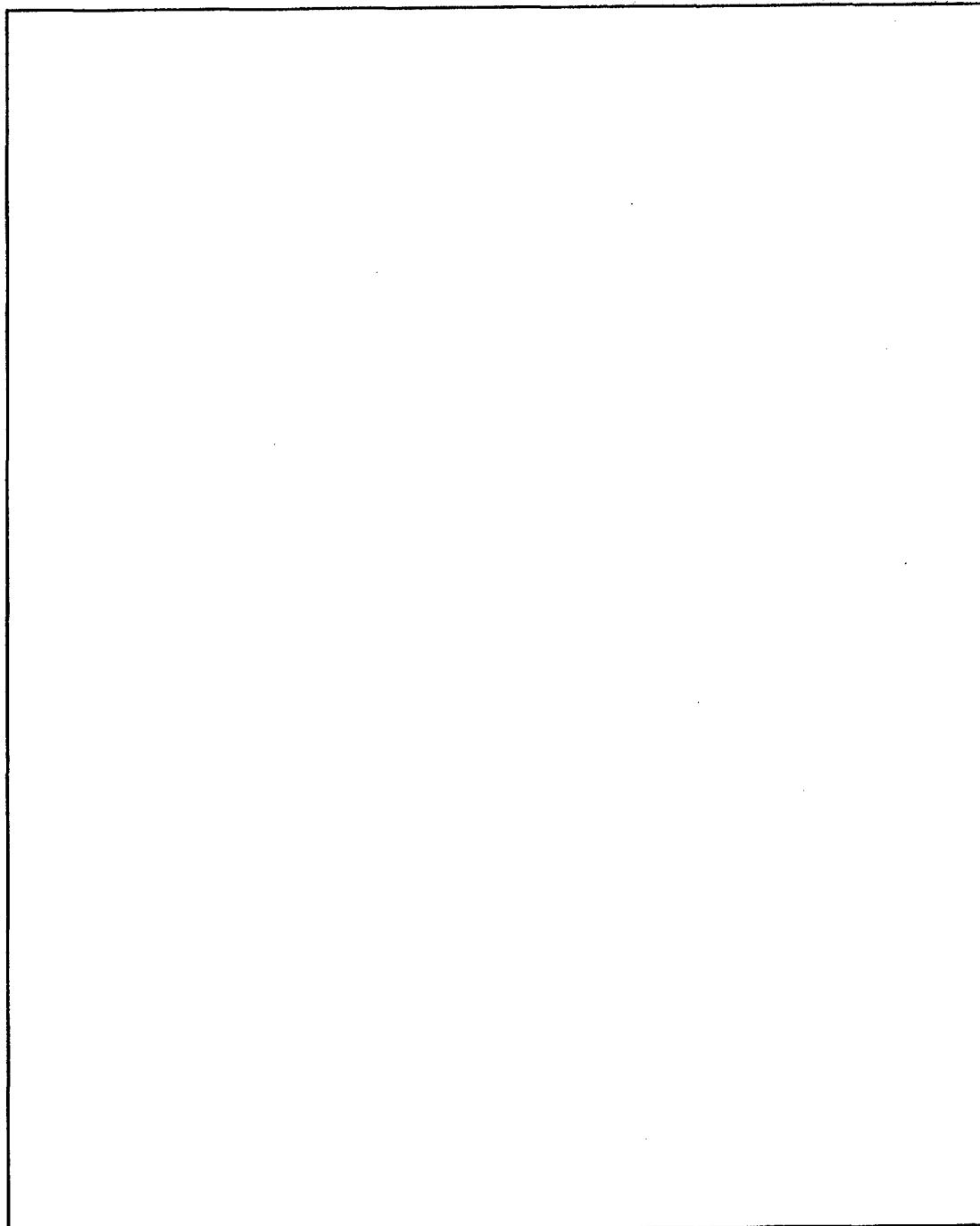
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## **Defense Logistics Agency Comments**



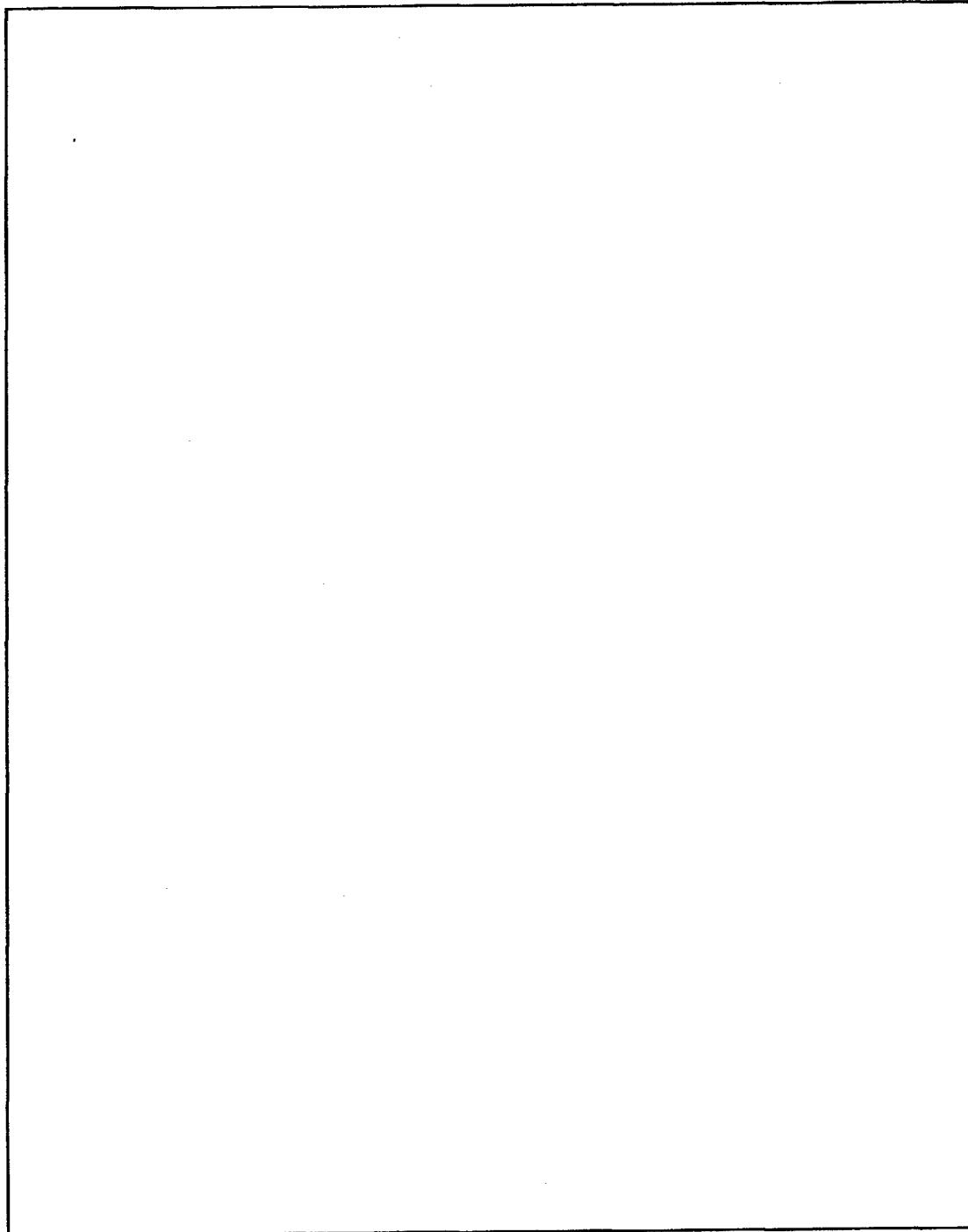
**Defense Logistics Agency Comments**

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**Defense Logistics Agency Comments**

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## **Audit Team Members**

Shelton R. Young	Director, Logistics Support Directorate
James B. Helfrich	Audit Program Director
Joel K. Chaney	Audit Project Manager
David L. Luce	Senior Auditor
Ted R. Paulson	Senior Auditor
Anthony C. Hans	Auditor
Scott K. Miller	Auditor
Melanie S. Steel	Auditor

TYPE OF REPORT: AUDIT

DATE OF POSITION: 8 Oct 93

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO: Draft Report on the Management of Kits  
(Project No. 2LE-0041)

RECOMMENDATION: We recommend that the Commander, Army Materiel Command; the Commander, Naval Supply Systems Command; the Commander, Air Force Materiel Command; and the Director, Defense Logistics Agency jointly develop and implement guidance for evaluating kit disassembly or reutilization when inventories exceed forecast requirements levels. The guidance should provide for oversight to ensure that evaluations are performed and include procedures for coordinating the evaluation with other Military Departments and Defense Logistics Agency inventory control points.

DLA COMMENTS: We concur that DLA and the Services should evaluate both the potential savings to be derived from the disassembly of kits, and the costs associated with this disassembly, to determine if a change in current business practices is warranted. We recommend that OSD chair the group to ensure uniform policy across the Services/Agencies. If a kit contains parts managed by multiple Integrated Managers, the guidance needs to explain how this will work and thus should come from OSD.

INTERNAL MANAGEMENT CONTROL WEAKNESSES:

- Nonconcur. (Rationale must be documented and maintained with your copy of the response.)
- Concur; however, weakness is not considered material. (Rationale must be documented and maintained with your copy of the response.)
- Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

MONETARY BENEFITS:

DLA COMMENTS:

ESTIMATED REALIZATION DATE:

AMOUNT REALIZED:

DATE BENEFITS REALIZED:

ACTION OFFICER: Brenda Meadows, MMSLR, x75598, 5 Oct 93

PSE REVIEW/APPROVAL: James J. Grady, Deputy Executive Director, Supply Management, MMSD, x70510

DLA APPROVAL: Helen T. McCoy, Acting Chief Financial Officer (Comptroller)

TYPE OF REPORT: AUDIT

DATE OF POSITION: 8 Oct 93

PURPOSE OF INPUT: INITIAL POSITION

AUDIT TITLE AND NO: Draft Report on the Management of Kits  
(Project No. 2LE-0041)

FINDING: The Military Departments and DLA inventory control points did not have effective programs for the disassembly of excess kits to reclaim component parts or the reutilization of kits. The inventory control points' programs were ineffective because the Military Departments and DLA had not issued guidance for inventory managers to evaluate kit disposition, including guidance for coordinating the evaluation with other DoD inventory control points that have requirements for similar kits or kit components, and did not provide oversight to ensure that such evaluations were performed. As a result, the inventory control points had not reclaimed components valued at \$1.62 million from excess kits or reutilized excess kits valued at \$220,000. For 6 of the 19 kits that could have been disassembled or reutilized to satisfy requirements for kit components, inventory managers were purchasing components valued at \$305,000 that were available from the excess kits. (p. 8/Draft Report)

DLA COMMENTS: Partially concur. We agree that no disassembly program exists. However, we can neither agree or disagree with the savings attributed to such a program in this audit. There may be no future requirement for some of the items for which a disassembly cost would be incurred. Other items, where we are in a current buy position, would save money only if a buy can be cancelled without an exorbitant termination charge. We agree that savings should accrue from a well installed disassembly program, but we cannot, based on this audit, agree to a specific amount.

INTERNAL MANAGEMENT CONTROL WEAKNESSES:

- Nonconcur. (Rationale must be documented and maintained with your copy of the response.)
- Concur; however, weakness is not considered material. (Rationale must be documented and maintained with your copy of the response.)
- Concur; weakness is material and will be reported in the DLA Annual Statement of Assurance.

MONETARY BENEFITS:

DLA COMMENTS: See comments above.

ESTIMATED REALIZATION DATE:

AMOUNT REALIZED:

DATE BENEFITS REALIZED:

ACTION OFFICER: Brenda Meadows, MMSLR, x75598, 5 Oct 93

PSE REVIEW/APPROVAL: James J. Grady, Jr., Deputy Executive Director, Supply Management, MMSD, x70510

DLA APPROVAL: Helen T. McCoy, Acting Chief Financial Officer  
(Comptroller)



DEFENSE LOGISTICS AGENCY  
HEADQUARTERS  
CAMERON STATION  
ALEXANDRIA, VIRGINIA 22304-6100



IN REPLY  
REFER TO FOI

15 OCT 1993

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING,  
DEPARTMENT OF DEFENSE

SUBJECT: Draft Report on the Management of Kits (Project No.  
2LE-0041)

This is in response to your 25 August 1993 request.

2 Encl

*Jacqueline G. Bryant*  
JACQUELINE G. BRYANT  
Chief, Internal Review Office  
Office of Comptroller

CC:  
MM



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE



20 OCT 1993

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING  
OFFICE OF THE INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE

SUBJECT: DoD(IG) Report, "Draft Audit Report on  
Management of Kits, August 25, 1993,"  
(DoD(IG) Report No. 2LE-0041) - INFORMATION MEMORANDUM

This is in reply to the request for comments on the findings  
and recommendations made in subject DoD(IG) GAO report.

We have evaluated the subject report and agree with the  
findings of the auditor. This office concurs with the  
recommendation of corrective action and will issue guidance to Air  
Force Materiel Command (AFMC) to evaluate its guidance to assure  
improved performance in managing kits no later than December 1,  
1993.

In addition, we will ask AFMC to coordinate the improved  
guidance with the other Components. This could be accomplished by  
a working group of the Joint Services and Defense Logistic Agency  
inventory control points by April 1, 1994.

The action officer for this case is Winifred A. Reed, Room  
4A276, extension 5-2531.

*Allen A. Beckett*  
Allen A. BECKETT  
Analyst, Sup/Fuels Pd Div  
Directorate of Supply  
DCS, Logistics



DEPARTMENT OF THE NAVY  
OFFICE OF THE ASSISTANT SECRETARY  
(Research, Development and Acquisition)  
WASHINGTON, D C 20350-1000

22 OCT 1993

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE, ASSISTANT INSPECTOR  
GENERAL FOR AUDITING

Subj: DODIG DRAFT AUDIT REPORT ON THE MANAGEMENT OF KITS  
(PROJECT NO. 2LE-0041)

Ref: (a) DODIG memo of 25 Aug 93

1. In response to reference (a), we have reviewed the subject report, and concur with its finding, recommendation, and monetary benefits. Moreover, we will work with the other Services and DLA to develop guidance for kit disassembly. However, we recommend this effort be coordinated by the Deputy Under Secretary of Defense (Logistics).

*Edward C. Whitman*

Copy to:  
NAVINSGEN  
NAVCOMPT (NCB-53)

## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title:** Management of Kits

**B. DATE Report Downloaded From the Internet:** 04/17/99

**C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):** OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-2884

**D. Currently Applicable Classification Level:** Unclassified

**E. Distribution Statement A:** Approved for Public Release

**F. The foregoing information was compiled and provided by:**  
**DTIC-OCA, Initials:** VM **Preparation Date** 04/17/99

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